CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 92-041

SITE CLEANUP REQUIREMENTS FOR:

REDDING PETROLEUM, INC.; GEORGE E. REDDING and RUTH T. REDDING; PHILLIPS PETROLEUM COMPANY; WENDY'S INTERNATIONAL, INC.; WENWEST, INC.; and SUSAN MAY ROSE
1551 MONUMENT BOULEVARD
CONCORD, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. **Site Description** - The site is currently a Wendy's Restaurant located at 1551 Monument Boulevard, Concord. The property had an address change from 1301 Monument Boulevard. There is a single building on the approximately 0.6 acre property (see Figure 1). The site was a gasoline service station from before 1960 to 1984.

2. **Site History** - The owners of the property while it was an operating gasoline service station included: **1961-80** Wiltower Properties, Inc. (from 1976, a subsidiary of Aminoil USA, Inc., which was a subsidiary of R.J. Reynolds Industries, Inc.); **1980** Aminoil USA, Inc. (merged with Phillips Oil Company in 1984 and subsequently Phillips Petroleum Company in 1985); **1980** Redding Petroleum, Inc.; **1980-84** George E. Redding and Ruth T. Redding; and **1984** Redding Petroleum, Inc. Subsequent property owners included: **1984** Wendy's International, Inc. (Wendy's); **1984-85** Wenwest, Inc.; and **1985-present** Susan May Rose (who leased the property to Wenwest, Inc.). For the purposes of this Order, Redding Petroleum, Inc., George E. and Ruth T. Redding, Phillips Petroleum Company, Wendy's International, Inc., Wenwest, Inc., and Susan May Rose are hereinafter collectively called the Dischargers.

3. **Sources and Incidents of Pollution** - Historically, at least three underground storage tanks were located at the site, but it is not known what they contained nor what their capacities were. The tanks were removed in late 1984 or early 1985, but there is no record of the tank removal, of any polluted soil removal nor of any soil sampling at the time of removal.

   One gasoline spill or leak, estimated to be 800 gallons, was detected in 1983. The tanks were emptied in August 1983. At least one extraction well approximately 20 to 25 feet deep was reportedly used to recover about 1,000 gallons of gasoline and water. A neighbor reported that he pumped groundwater and gasoline out of his domestic irrigation well, located 150 feet downgradient of the site, throughout the 1980s. The gasoline in this irrigation well is assumed to have migrated from the subject site. Other leaks or spills may have occurred at the site while operated as a service station.

In 1985, a strong gasoline odor was detected in the restrooms of the restaurant.

4. **Previous Investigations** - Investigations were conducted along several lines of inquiry. Geotechnical investigations were undertaken before the restaurant was built. A subsequent investigation to determine the cause of gasoline odor was conducted upon completion of the restaurant. Additional investigations were conducted to define the extent of subsurface soil and groundwater contamination, and to characterize the underground environment as to its potential for remediation.

4.1 **Geotechnical Investigation** - In 1984, J.H. Kleinfelder & Associates conducted a geotechnical investigation for Wendy's to determine whether the site was suitable for construction of a restaurant. This study was completed before transfer of the title to Wendy's. The investigation concluded that the site was suitable for construction, but also commented that "a gasoline layer was noticed floating on the groundwater in the borehole."

4.2 **Gasoline Odor Investigations** - In 1985, Dames & Moore conducted a subsurface investigation for Wenwest, Inc. "to assess the nature of the contamination problem and to identify potential source areas for the detected gasoline odor." Three groundwater monitoring wells were installed, but no soil or groundwater samples were collected for chemical analyses. However, a floating gasoline sample collected from the neighbor's irrigation well was analyzed for lead-in-gas concentration. The result was 0.8 gram per gallon, equivalent to the lead-in-gas standard for regular gasoline in California since 1983. Gasoline vapors were determined to be present at two of the wells using a total volatile level (TVL) sniffer. No floating gasoline was detected in the on-site wells.

The investigation report concluded the following: 1) the vapors could have resulted from the previous gasoline spill; 2) the vapor exhaust well and pipe had controlled the odor problem; 3) additional remedial measures were not warranted at that time; and 4) periodic monitoring of the interior of the restaurant for organic vapors should be conducted.

In 1988, Dames & Moore conducted a further investigation for Wenwest, Inc. after gasoline odor was again detected in the restrooms and the County Health Services Department required closure of the women's restroom. Visual examination of the groundwater from the three on-site monitoring wells indicated that no floating product was present. Groundwater from two of the wells had no odor or photoionization detector (PID) readings, but one of the wells had a strong gasoline odor and a PID reading of greater than 20 ppm. The neighbor's well did contain approximately ¾ inch of floating product.

4.3 **Soil and Groundwater Investigations** - In 1990, Dames & Moore conducted soil and groundwater investigations for Wenwest, Inc. and at the Board's request in a November 27, 1989 letter. The investigation included installation of off-site groundwater monitoring wells, drilling soil borings to define the extent of soil pollution, collecting soil and groundwater samples for chemical analyses, measuring floating product thicknesses in the wells and conducting an aquifer characterization study.

Results of this investigation indicated soil pollutant concentrations as high as 630 mg/kg total petroleum hydrocarbons (TPH), 12 mg/kg benzene, 40 mg/kg toluene, 69 mg/kg ethylbenzene and 100 mg/kg xylenes. Highest detected groundwater pollutant concentrations were 210,000 µg/L TPH, 9,200 µg/L benzene, 6,900 µg/L toluene, 2,500 µg/L ethylbenzene and 12,000 µg/L xylenes. Maximum floating product thicknesses were 0.7 feet for on-site well MW-1 and 0.21 feet for the neighbor's irrigation well. The report concluded that the pollutant plume extended a minimum of 500 feet downgradient of the site and had not been fully characterized.

On August 14, 1990, additional investigative work, submittal of a comprehensive remedial action plan and quarterly groundwater sampling were requested by the Board in a letter pursuant to Section 13267 of the Water Code. The investigative work was performed by Dames & Moore in 1991, under the authorization of Redding Petroleum, Inc., George E. and Ruth T. Redding, Phillips Petroleum Company, Wendy's International, Inc., Wenwest, Inc. and Susan May Rose, and a report was submitted. The work was similar to the previous investigation to better define the extent of pollution, and, also, included a test to evaluate the applicability of soil vapor extraction.

Results of this investigation indicated soil pollutant concentrations as high as 1900 mg/kg TPH, 11 mg/kg benzene, 49 mg/kg toluene, 22 mg/kg ethylbenzene and 97 mg/kg xylenes. Highest detected groundwater pollutant concentrations were 120,000 µg/L TPH, 20,000 µg/L benzene, 26,000 µg/L toluene, 4,400 µg/L ethylbenzene and 17,000 µg/L xylenes. Maximum floating product thickness was 0.3 feet for on-site well MW-1.

The May 28, 1991 report concluded that there are two plume centroids; the pollution was not well-defined in the downgradient direction; the low permeability of the on-site soils would not favor a soil extraction system; one groundwater extraction well should be installed as a recovery system; and, as a soil treatment technique, "Excavation is not considered an attractive alternative due to construction constraints and cost."

5. **Site Hydrogeology** - From the May 28, 1991 report: "The soils at the site consist of dominantly clay matrix materials. Soils near the ground surface are typically higher in sand content than the underlying soils. Grain size also coarsens slightly from west to east across the site, toward Lacey Lane."

Groundwater is approximately 15 feet below grade at the site and flows in a northwest direction toward Walnut Creek, a distance of about 2750 feet. Surface runoff from the site would flow through storm drains to Walnut Creek.

6. **Scope of this Order** - This Order contains tasks that require the Dischargers to: 1) install monitoring wells that adequately define the horizontal and vertical extent of groundwater pollution; 2) define the horizontal and vertical extent of the soil pollution and/or develop a remedial action plan to cleanup the soil pollution; 3) develop a remedial action plan; and 4) implement the remedial action plan.

7. On October 28, 1968, the State Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California." This policy calls for maintaining the existing high quality of State waters unless it is demonstrated that any change would be consistent with the maximum public benefit and not unreasonably affect beneficial uses. The discharge of waste to the groundwater at this site is in violation of this policy. Therefore, the groundwater quality needs to be restored to its original quality to the extent reasonable.

8. On March 30, 1989, the Regional Water Quality Control Board incorporated the State Board Policy of "Sources of Drinking Water" into this Regional Board's Basin Plan. The Regional Board's Policy provides for a Municipal and Domestic Supply Designation for all waters of the State that meet prescribed criteria. Two relevant requirements are: 1) the total dissolved solids in the groundwater must not exceed 3000 mg/L, and 2) the water source must have the capacity to produce 200 gallons per day. Groundwater at the site is expected to satisfy the criteria. Therefore, the groundwater at the site is considered a source of Drinking Water under State Board Resolution 88-63.

9. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives and beneficial uses for the Ygnacio Valley Groundwater Basin, Walnut Creek and contiguous surface waters.

10. The existing and potential beneficial uses of the groundwater in the Ygnacio Valley Groundwater Basin which is underlying and adjacent to the site include:

    a. Municipal and domestic water supply;
    b. Industrial process water supply;
    c. Industrial service water supply; and
    d. Agricultural water supply.

11. The existing and potential beneficial uses of Walnut Creek and contiguous surface waters include:

    a. Contact and non-contact water recreation
    b. Warm and cold fresh water habitat
    c. Wildlife habitat
    d. Fish migration and spawning

12. The Dischargers have caused or permitted, and threaten to cause or permit, waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.

13. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.

14. Interim containment and cleanup measures need to be implemented to alleviate the threat to the environment posed by the migration of pollutants and to provide a substantive technical basis for designing and evaluating the effectiveness of final cleanup alternatives.

15. The Board has notified the Dischargers and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.

16. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the Dischargers shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade, or threaten to degrade, water quality or adversely affect, or threaten to adversely affect, the beneficial uses of the waters of the State is prohibited.

2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. **SPECIFICATIONS**

1. The storage, handling, treatment or disposal of soil or groundwater containing pollutants shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The Dischargers shall conduct monitoring and investigatory activities as needed to define the current local hydrogeologic conditions, and the horizontal and vertical extent of soil and groundwater pollution. Should monitoring results show evidence of pollutant migration, additional characterization of pollutant extent may be required.

3. The cleanup goals for source area soils shall be background concentrations for metals and petroleum products and no greater than 1 mg/kg for total volatile organic compounds (VOCs). Alternate soil cleanup goals may be proposed by the Dischargers based on site specific data. If higher levels of pollutants to be left in soils are proposed, the Dischargers must demonstrate that the aforementioned cleanup goal is infeasible, that alternate levels will not threaten the quality of waters of the State, and that human health and the environment are protected. Final cleanup goals for source area soils must be acceptable to the Executive Officer. If any significant concentrations of chemicals are left in the soil, follow-up groundwater monitoring will be required.

4. Final cleanup goals for polluted groundwater, including sources of drinking water, on-site and off-site, shall be background water quality if feasible, in accordance with the State Water Resources Control Board's Resolution No. 68-16. If background water quality goals are not achievable, as determined by data submitted in annual reports, alternative goals may be proposed but must be approved by the Board. Alternate goals may include applicable standards, such as Maximum Contaminant Levels, and shall be based on an evaluation of the cost, effectiveness and a risk assessment to determine the effects on human health and the environment. These goals shall reduce the mobility, toxicity and volume of pollutants.

5. If groundwater extraction and treatment is considered as an alternative, the feasibility of water reuse or disposal to the sanitary sewer must be evaluated. Based on Regional Board Resolution 88-160, the Dischargers shall optimize, with a goal of 100%, the reclamation or reuse of groundwater extracted as a result of

cleanup activities. The Dischargers shall not be found in violation of this Order if documented factors beyond the Dischargers' control prevent the Dischargers from attaining this goal, provided the Dischargers have made a good faith effort to attain this goal. If reuse is part of a proposed alternative, an application for Waste Discharge Requirements may be required. If discharge to waters of the State is part of a proposed alternative, an NPDES permit application must be completed and submitted, and must include the evaluation of the feasibility of water reuse and disposal to the sanitary sewer.

C. **PROVISIONS**

1. The Dischargers shall perform all investigation and cleanup work in accordance with the requirements of this Order. All technical reports submitted in compliance with this Order shall be satisfactory to the Executive Officer, and, if necessary, the Dischargers may be required to submit additional information.

2. To comply with all Prohibitions and Specifications of this Order, the Dischargers shall meet the following compliance task and time schedule:

COMPLIANCE DATE AND TASKS

a. **COMPLIANCE DATE: July 1, 1992**

WORKPLAN FOR SOIL AND GROUNDWATER POLLUTION CHARACTERIZATION: Submit a technical report acceptable to the Executive Officer containing a proposal to define the horizontal and vertical extent of soil and groundwater pollution. Instead of submittal of a soil pollution characterization workplan, Dischargers may submit a workplan for remediation of the soil pollution by excavation and removal.

b. **COMPLIANCE DATE: November 18, 1992**

COMPLETION OF SOIL AND GROUNDWATER CHARACTERIZATION: Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report submitted for Provision 2.a.

c. **COMPLIANCE DATE: November 18, 1992**

INTERIM REMEDIAL ACTIONS: Submit a technical report acceptable to the Executive Officer which contains an evaluation of interim remedial alternatives, a recommended plan for interim remediation

and an implementation time schedule. This report shall evaluate the removal and/or cleanup of polluted soils and alternative hydraulic control systems to contain and to initiate cleanup of polluted groundwater and any floating product. If this proposal includes the extraction of groundwater, the proposal shall describe the treatment and discharge of such extracted groundwater.

d. **COMPLIANCE DATE: March 18, 1993**

COMPLETION OF INTERIM REMEDIAL ACTIONS: Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report submitted for Provision 2.c.

e. **COMPLIANCE DATE: March 18, 1994**

EVALUATE INTERIM REMEDIAL ACTION MEASURES: Submit a technical report acceptable to the Executive Officer which evaluates the effectiveness of the interim remedial actions. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zone of the extraction wells, establishment of the cones of depression by field measurements, and presentation of chemical monitoring data, if extraction wells are proposed. This report shall also evaluate and document the removal and/or cleanup of polluted soils, if removal and/or cleanup is an element of the remedial measure.

MODIFICATION TO INTERIM ACTIONS: Specific modifications to the interim remedial system and an implementation time schedule shall be proposed in the event that the soil remediation or hydraulic control system is demonstrated not to be effective in containing and removing pollutants.

f. **COMPLIANCE DATE: May 18, 1994**

COMPLETION OF MODIFICATIONS TO INTERIM REMEDIAL ACTIONS: Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report and modifications submitted for Provision 2.e.

g. **COMPLIANCE DATE: March 20, 1995**

PROPOSED FINAL CLEANUP OBJECTIVES AND REMEDIAL ACTIONS: Submit a technical report acceptable to Executive Officer

containing the results of the remedial investigation; an evaluation of the installed interim remedial measures; a feasibility study evaluating alternative final remedial measures; the recommended measures necessary to achieve final cleanup objectives; and the tasks and time schedule necessary to implement the recommended final remedial measures. If this proposal includes the extraction of groundwater, the proposal shall describe the treatment and discharge of such extracted groundwater.

3. The submittal of technical reports evaluating immediate, interim and final remedial measures will include a projection of the cost, effectiveness, benefits and impact on public health, welfare and environment of each alternative measure. The reports shall be consistent with the guidance provided by:

   a. Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300);
   b. Section 25356.1 of the California Health and Safety Code;
   c. State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California."

4. If the Dischargers are delayed, interrupted or prevented from meeting one or more of the compliance dates specified in this Order, the Dischargers shall promptly notify the Executive Officer, and the Board may consider revision to this Order.

5. All hydrogeologic plans, specifications, reports and documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist or a California registered civil engineer.

6. The Dischargers shall comply with the Self-Monitoring Program as adopted by the Board and as may be amended by the Executive Officer.

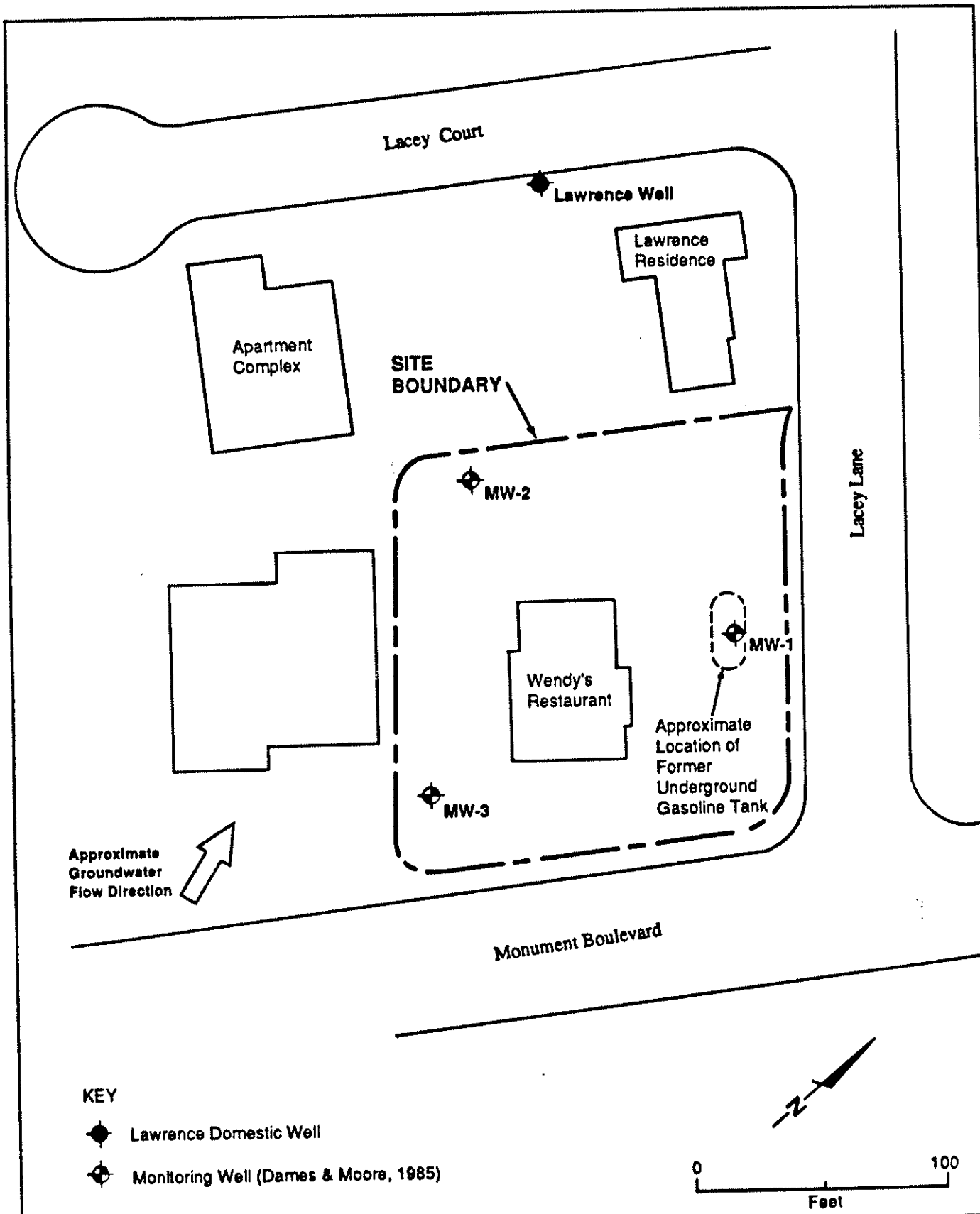
7. The Dischargers shall file a report with the Board at least 30 days in advance of any changes in occupancy or ownership associated with the Site described in this Order.

8. The Board will review this Order periodically and may revise the requirements or compliance schedule when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 15, 1992.

Steven R. Ritchie
Executive Officer

Attachments: Figure 1 — Site Map
Self-Monitoring Program



14399-002-043	WenWest, Inc.	**FIGURE 1 — SITE MAP**
Dames & Moore	WENDY'S RESTAURANT Concord, California	

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

REDDING PETROLEUM, INC.; GEORGE E. REDDING and RUTH T. REDDING;
PHILLIPS PETROLEUM COMPANY; WENDY'S INTERNATIONAL, INC.;
WENWEST, INC.; and SUSAN MAY ROSE

1551 MONUMENT BOULEVARD
CONCORD, CONTRA COSTA COUNTY

ORDER NO. 92-041

A. GENERAL

1. BASIS

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

2. PURPOSE

The principal purposes of a waste discharger's monitoring program, also referred to as a self-monitoring program, are: 1) To document compliance with site cleanup requirements and prohibitions established by this Regional Board; 2) To facilitate self-policing by the waste dischargers in the prevention and abatement of pollution arising from waste discharge; 3) To develop or assist in the development of effluent or other limitations, discharger prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards; and 4) To prepare water and wastewater quality inventories.

3. ACCESS BY BOARD

The Dischargers shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:

a. Entry upon premises at which any pollution sources exist, or may potentially exist, or at which any required records are kept, which are relevant to the Order.

b. Access to copy any records required to be kept under the terms and conditions of the Order.

c. Inspection of any monitoring equipment or methodology implemented in response to the Order.

d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the Dischargers.

B. SAMPLING AND ANALYTICAL METHODS

1. Sample collection, storage and analyses shall be performed according to the EPA Method 8000 series described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," dated November 1986, or other methods approved and specified by the Executive Officer of the Regional Board.

2. All water samples shall be analyzed by State certified laboratories using approved EPA methods for the type of analysis performed. All laboratories shall maintain quality assurance/quality control records for Board review.

3. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. SELF-MONITORING REPORTS

1. QUARTERLY REPORTS

The Dischargers shall submit detailed quarterly progress reports summarizing work accomplished towards achieving compliance with each of the tasks and schedules in Provision C.2. of the Order. The quarterly technical reports are to be submitted as a part of the self-monitoring reports required in Section C.2. The reports shall include:

a. a summary of work completed since the previous quarterly report, and work projected to be completed by the time of the next quarterly report,

b. water quality data for all existing and future monitoring and extraction wells, including laboratory reports, as described in Section C.3. below,

c. appropriately scaled and labeled maps showing the location of all monitoring wells, extraction wells and existing structures,

d. cross sections, if changed from the previous quarter, depicting subsurface geologic information and corresponding correlations based on boring data,

e. updated water table and piezometric surface maps for all affected water bearing zones, and isoconcentration maps for keys pollutants in all affected water bearing zones,

f. a cumulative tabulation of all well construction data, groundwater levels and chemical analysis results for all on-site and off-site monitoring wells,

g. identification of potential problems which will cause or threaten to cause noncompliance with the Order and what actions are being taken or planned to prevent these obstacles from resulting in noncompliance with the Order, and

h. in the event of noncompliance with the Provisions and Specifications of the Order, the report shall include written justification for noncompliance and proposed actions to achieve compliance.

2. ANNUAL REPORTS

An annual report shall be submitted by January 31 of each year. It shall include a summary of the progress made toward compliance with the tasks and schedules of Provision C.2. of the Order for the past year and a projection of the progress to be made in the upcoming year. Cumulative data for each chemical present above detectable concentrations will be presented including minimum, maximum, median and average concentrations for the year. The annual report shall also include water level data and isoconcentration maps for each chemical present above detectable concentrations.

3. DATA RESULTS

a. Results from each required analysis and observation shall be submitted in the quarterly self-monitoring reports. Results shall also be submitted for any additional analyses performed by the Dischargers at the specific request of the Regional Board. Quarterly water level data shall also be submitted in the quarterly report.

b. The quarterly report shall also identify the analytical procedures used for analyses either directly in the report or by reference to a standard plan accepted by the Regional Board's Executive Officer. Any special methods shall be identified and shall have prior approval of the Executive Officer.

c. Laboratory results shall be copied as an appendix to the regular report. These results should include all laboratory quality assurance/quality control data and results, such as blanks, trip blanks, duplicates, etc.

d. Original laboratory results shall be retained and shall be made available for inspection for at least three years after origination and until after all continuing or impending legal or administrative actions are resolved.

4. QUARTERLY REPORTING DATES

Written reports shall be filed regularly each quarter within fifteen days from the end of the quarter monitored. Reports will be due in the months of April, July, October and January. The first quarterly report is due October 15, 1992.

5. LETTER OF TRANSMITTAL

A letter transmitting self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period and actions taken or planned for the purpose of correcting any requirement violation. If the Dischargers have previously submitted a detailed time schedule for correcting requirement violations, a reference to this correspondence will be satisfactory. Monitoring reports and the letter transmitting reports shall be signed by either a principal executive officer or a duly authorized employee. The letter shall contain the following certification:

> "I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

6. COPIES OF CORRESPONDENCE, REPORTS AND DOCUMENTS

Copies of all correspondence, reports and documents pertaining to compliance with the Prohibitions, Specifications, Provisions and Self-Monitoring Program of the Order shall be provided to the following agencies:

a. Executive Officer
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

b. Contra Costa County Health Services Department
Environmental Health Division
4333 Pacheco Boulevard
Martinez, CA 94553-2295

D. SAMPLING STATIONS AND SCHEDULE OF SAMPLING AND ANALYSIS

1. DESCRIPTION OF SAMPLING STATIONS

a. All groundwater monitoring wells listed below and as shown in Figure SMP1.

W-1	W-5	W-8
W-2	W-6	W-9
W-3	W-7	W-10
W-4		

b. The neighbor's irrigation well, designated as the Lowrance well.

c. In addition, all groundwater monitoring and extraction wells, which will be installed during future investigative and remedial action work.

2. SCHEDULE OF SAMPLING AND ANALYSIS

a. For any new monitoring or extraction well that may be constructed, sampling and analysis shall be conducted on a quarterly schedule.

b. A groundwater sample shall be collected from each sampling station listed in item D.1. above during each quarterly sampling period.

c. Groundwater samples shall be analyzed for total petroleum hydrocarbons as gasoline using a method approved by Regional Board's Executive Officer and aromatics using EPA Method 8020.

d. Groundwater elevations shall be obtained and reported on a quarterly basis from each monitoring, extraction and irrigation well listed in item D.1. above. In addition, the depth of the pump in any extraction wells shall be obtained and submitted in the quarterly report with the sampling results.

e. Depths of all wells shall be determined on an annual basis and compared to the depth of the well as constructed. The results of this comparison shall be reported in the annual report specified in Section C.2. above.

I, Steven R. Ritchie, Regional Board Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data to determine compliance with Regional Board Order No. 92-041.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Dischargers and revisions will be ordered by the Executive Officer.

Steven R. Ritchie
Executive Officer

Effective Date: April 15, 1992

Attachments: Figure SMP1 — Facility and vicinity map including well locations

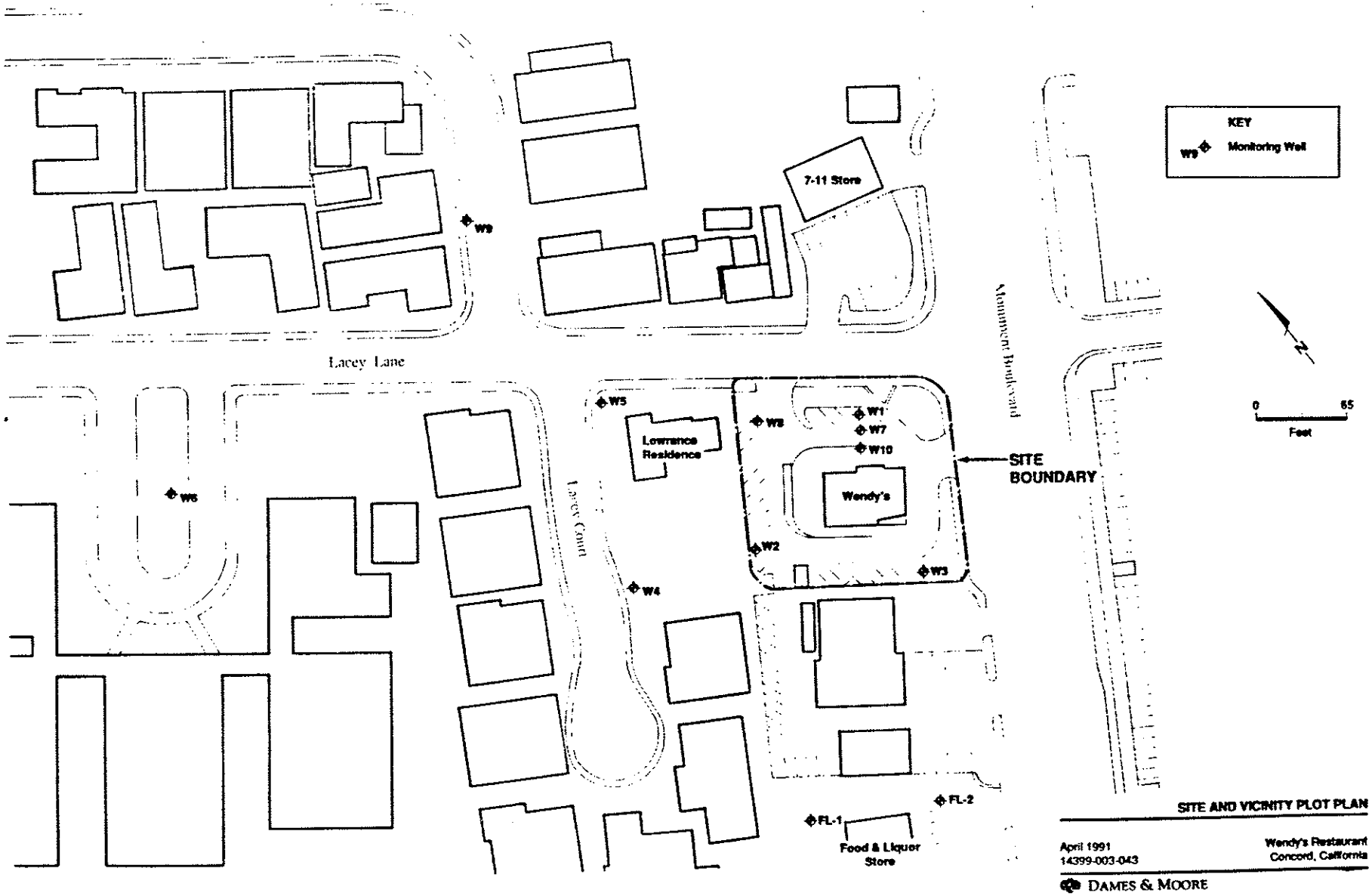


FIGURE SMP1 — FACILITY AND VICINITY MAP INCLUDING WELL LOCATIONS